

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON D.C., 20554

In the Matter of

Federal-State Joint Board on  
Universal Service

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CC DOCKET 96-45

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COMMENTS OF SPRINT CORPORATION  
ON SPECIFIC QUESTIONS

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## **TABLE OF CONTENTS**

	<b><u>Page</u></b>
Summary -----	iii
1. -----	1
2. -----	2
3. -----	2
4. -----	3
5. -----	3
6. -----	3
7. -----	4
10 -----	4
11 -----	5
26 -----	5
27 -----	7
28 -----	7
29 -----	8
30 -----	9
31 -----	9
32 -----	9
33 -----	10
34 -----	10
35 -----	10
36 -----	11
37 -----	11
38 -----	11
39 -----	11
40 -----	11
41 -----	12
42 -----	12
43 -----	12
44 -----	12
45 -----	13
46 -----	13
47 -----	13
48 -----	13
56 -----	14
57 -----	14
58 -----	15
59 -----	16
60 -----	16
61 -----	16

62.	-----	17
63.	-----	17
69.	-----	18
70.	-----	18
71.	-----	19
72.	-----	20

## **SUMMARY**

1. Current rates for services included within the definition of universal services should be assumed to be affordable.
2. Income levels, not rates or other measures, is the driving factor in determining affordability.
3. Use of a national benchmark rate in determining affordability is an advantage because it assures fair treatment to all consumers of basic residential telephone services regardless of where they live or which provider they use.
4. The needs of the subscriber -- not of the providers -- should be paramount and thus for a carrier to be eligible for universal service support they must provide all of the core services.
5. Loop costs do not fully represent the costs of providing core services.
6. The Act requires that services available for discounts for schools, libraries and health care providers must be limited to telecommunications services specifically identified by the Commission.
7. Non-telecommunications services such as inside wiring cannot be eligible for the universal service discounts for schools, libraries, and health care providers.
10. Only the entities specifically identified in the Act may receive the discounts and those entities cannot sell, resale or transfer, in any manner, those discounts services to others.
26. The existing high-cost support mechanism may not be left in place because of its implicit subsidies and failure to require all telecommunications service providers to contribute. A limited exception may be granted, on a modified basis, for rural companies.
27. The existing high-cost support system should not be kept, except to the extent a short transition period is deemed necessary and to the extent its deemed advisable to maintain the system for rural telephone companies that are not subject to Section 251(c).
28. There are no advantages - only disadvantages - to using ILEC book costs to determine universal support payments to competitive carriers.
29. Price cap companies must be eligible for high-cost support.
30. Federal price cap companies must be eligible for high-cost support. Social contracts should have no bearing on eligibility for high-cost support.
31. A bifurcated plan should not be adopted, with the possible exception of continuation of the existing mechanism for rural telephone companies that are not subject to Section 251(c).
32. If such rural telephone companies are left under the existing system, then for funding purposes the administrator will need to ascertain the funding required by any rural company remaining under the old mechanism and add that difference to the amount from the new system.
33. The level of subscription should not impact the subsidy available.
34. The programs that are developed to support high cost areas should work in insular areas.
35. The Joint Board should recommend adoption of Sprint's universal service plan including the use of the BCM. To the extent further details need to be worked out, Sprint

recommends the use of a neutral third party to submit recommendations to the Commission.

36. Pacific Bell and the BCM authors are discussing combining their models.

37. The BCM proxy model determines the costs for providing defined universal services by developing forward looking costs of the facilities and expenses needed to provide only those services.

38. BCM2 has the flexibility to accommodate any modifications needed due to the introduction of additional services to the list of universal services to be supported.

39. The BCM2 is capable of including any network investment or expense required to provide access to any advanced telecommunications and information services.

40. Proxy models are cost models and do not, per se, deal with rates charged for services.

41. BCM2 is capable of providing proxy costs for all areas. Costs for Alaska have been filed with the Commission and costs for other insular areas will be filed by the end of August.

42. The BCM develops the costs necessary for an efficient firm to build a network to provide the identified universal services. Support based on these costs will be sufficient to provide and maintain quality services.

43. Companies that have costs substantially above the BCM developed costs should not receive additional support because to provide such additional support would destroy any incentive to reduce costs and become more efficient.

44. The BCM achieves technological neutrality through the use of state of the art commercially available materials.

45. Any proxy model that is adopted must be a public document.

46. No, the models must be public documents.

47. ILEC book costs should not be used for proxy models. The BCM proxy model is based almost entirely on publicly available input data, with the exception being certain switch manufacturer proprietary data.

48. Yes, whether a proxy model is primarily developed with public or proprietary data is relevant to determining whether to adopt such model.

56. BCM does not use ILEC book cost, nor should it.

57. Wireless services are not yet standardized such that reasonably accurate cost inputs are available, but BCM has the flexibility to accommodate such additions once standardized information is obtainable.

58. A wire center is too large and the costs vary too much within a wire center -- thereby causing subsidies within the wire center -- to be used as the appropriate geographic area in projecting costs. Sample wire center data is submitted to demonstrate this point.

59. It is feasible to incorporate these changes, but not advisable.

60. The NCTA's suggested modifications should not be adopted.

61. BCM does not calculate support, just cost. Low income subscribership issues should be addressed through the existing Lifeline and Linkup programs.

62. The BCM uses unseparated costs, but this does not require changes to separations rules or access charge mechanism.

63. Sprint and Pacific are discussing the feasibility of integrating the models.

69. All of the CCL represents a subsidy to support universal service. The CCL (and the EUCL) are designed to cover the 25% of loop costs assigned to the interstate jurisdiction to help keep local telephone service prices low.

70. The CCLC should be eliminated. The cost of the loop should instead be recovered explicitly from the end user, as should the cost of funding universal service support.

71. Lifeline and Linkup should be continued but should be funded through the new universal services support system.

72. No exemptions should be granted, nor are they necessary, for small companies.

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<b>Universal Service</b>	)	

**COMMENTS OF SPRINT CORPORATION  
ON SPECIFIC QUESTIONS**

Sprint Corporation ("Sprint") on behalf of the Sprint LECs and Sprint Communications Company L.P., submits its Comments on selected questions as requested in the Common Carrier Bureau's July 3, 1996 Public Notice released in the above-captioned docket.<sup>1</sup>

**Definitions Issues**

1. Is it appropriate to assume that current rates for services included within the definition of universal service are affordable, despite variations among companies and service areas?

It is reasonable to assume that current rates for services are affordable. There are many variations in rates and calling scopes within the industry. However, the penetration rates that have been achieved indicate that the majority of consumers find basic telephone service affordable.<sup>2</sup> Additionally, one of the basic issues underlying the creation of an explicit, competitively neutral universal service funding mechanism is the need to rebalance existing rates to remove any existing implicit subsidies. This process of rate rebalancing and the advent of competition will, over time, insure the affordability of basic telephone service. Rate rebalancing will bring rates to their true economic cost and thus will help foster the advent of true competition. Competition in turn, drives the market to the price a willing buyer will pay and a

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<sup>1</sup> Public Notice, Common Carrier Bureau Seeks Further Comment on Specific Questions in Universal Service Notice of Proposed Rulemaking, CC Docket 96-45, DA 96-1078, released July 3, 1996.

<sup>2</sup> As noted in Amendment of the Commission's Rules and Policies to Increase Subscribership and Usage of the Public Switched Network, CC Docket No. 95-115, Notice of Proposed Rulemaking, released July 20, 1995 at para. 1, subscribership in the United States is almost 94% of households. While the Commission expressed concern that subscribership should be higher, the fact is that in setting an affordable benchmark for the average user, such a high subscribership level indicates that existing rates are affordable.

willing seller will sell. Thus competition, not regulation, will provide the foundation for affordable basic telephone service.

**2. To what extent should non-rate factors, such as subscribership level, telephone expenditures as a percentage of income, cost of living, or local calling area size be considered in determining the affordability and reasonable comparability of rates?**

Ideally, those who can afford to pay the full cost of service should be expected to do so, regardless of whether they live in a high-cost area. Income level, not rates or other measures, is the driving factor behind subscribership or penetration levels. Rates have very little to do with penetration and indeed studies indicate that basic residential service is extremely price inelastic.<sup>3</sup> Furthermore, price itself does not play that great of a role in a properly crafted universal service support mechanism such as the one proposed by Sprint because the universal service support mechanism will help level off the top end of the rate scale caused by high costs and rate rebalancing, thereby maintaining affordable rates.

Of course, there are certain very low income groups for whom any price is too much. For these groups the Lifeline and Linkup programs are necessary.

**3. When making the "affordability" determination required by Section 254(i) of the Act, what are the advantages and disadvantages of using a specific national benchmark rate for core services in a proxy model?**

The use of a national benchmark rate in determining affordability provides the ability to the Commission to assure fair treatment to all consumers of basic residential telephone services. Affordable service means different things to different people and may change by state, county, city, town, neighborhood and household. It would be impossible for the Joint Board to design a mechanism to treat each individual according to his own needs for affordable service. The Commission can assure a reasonable benchmark rate for all Americans regardless of where they live through the adoption of a national benchmark rate in combination with a proxy model. With

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<sup>3</sup> See, Telecommunications Demand in Theory and Practice, Lester D. Taylor, Kluwer Academic Publishers, 1994 at pp. 93-112. The studies presented reveal that 1) price elasticity of demand was consistently found to be less than .05, and 2) price was found to be statistically insignificant with regard to the probability of a household having basic residential service.



the resulting assured level of support, the various State Commissions can design rates and support processes that address specific needs of their constituents. The use of the Benchmark Cost Model (“BCM”) for this purpose allows support to be targeted to proven high-cost areas.

**4. What are the effects on competition if a carrier is denied universal service support because it is technically infeasible for that carrier to provide one or more of the core services?**

All carriers must be required to provide the core universal services in order to be eligible to receive universal service support. To do otherwise would mean that level of support would have to be revised to reflect the services that could be provided. While it is important that the support mechanism not impede competition, the Joint Board must first be concerned about the needs of subscribers and secondly about competitive entry.

**5. A number of commenters proposed various services to be included on the list of supported services, including access to directory assistance, emergency assistance, and advanced services, although the delivery of these services may require a local loop, do loop costs accurately represent the actual cost of providing core services? To the extent that loop costs do not fully represent the costs associated with including a service in the definition of core services, identify and quantify other costs to be considered.**

Loop costs do not fully represent the costs of providing core services. In addition to the loop, core services will require some portion of the switch and a portion of any physical property required for any advanced services. The provision of core services also requires a portion of maintenance, depreciation, and overhead expenses.

**Schools, Libraries, Health Care Providers**

**6. Should the services or functionalities eligible for discounts be specifically limited and identified, or should the discount apply to all available services?**

Clearly, in adopting the Telecommunications Act of 1996 (the “Act”) Congress intended that the services to be available for schools, libraries, and health care providers, are to be services specifically identified by the Commission. Section 254(c)(3), 47 USC Section 254(c)(3), speaks to the fact that “the Commission may designate additional services for such support mechanisms for schools, libraries, and health care providers.” These services are additional to the telecommunications services included within the definition of “universal service” contained in

Section 254(c)(1), 47 USC Section 254(c)(1), that are “telecommunications services that the Commission shall establish.” Thus, the specific services eligible for discounts are only those telecommunications services included within the Commission’s definition of “universal service” and such other specified telecommunications services as the Commission designates.

**7. Does Section 254(h) contemplate that inside wiring or other internal connections to classrooms may be eligible for universal service support of telecommunications services provided to schools and libraries? If so, what is the estimated cost of the inside wiring and other internal connections?**

Section 254(h) does not contemplate that inside wiring or other internal connections to classrooms may be eligible for universal service support of telecommunications services provided to schools and libraries because the same are not telecommunications services as defined in the Section 3 of the Act, 47 USC Section 153(46). Sprint acknowledges that Section 254(h)(1)(A), 47 USC Section 254(h)(1)(A) regarding health care providers is, on its face, limited to “telecommunications services” whereas Section 254(h)(1)(B), 47 USC Section 254(h)(1)(B) regarding schools and libraries only references “services.” However Section 254(h)(1)(B) goes on to reference “services that are within the definition of universal service under subsection (c)(3).” Subsection (c)(3) defines “universal service as “an evolving level of telecommunications service”. Accordingly, services such as inside wiring, that are not telecommunications services as defined in the Act and are not regulated by the Commission (or as by a State Commission) cannot be included.

**10. Should the resale prohibition in Section 254(h)(3) be construed to prohibit only the resale of services to the public for profit, and should it be construed so as to permit end user cost based fees for services? Would construction in this manner facilitate community networks and/or aggregation of purchasing power?**

No, such an interpretation would be too narrow and contrary to the plain language of the Act. The benefits granted in Section 254(h), 47 USC Section 254(h)(5), are limited to specifically defined entities as set forth in Section 254(h)(5), 47 USC Section 254(h), and, by virtue of Section 254(h)(3), are clearly intended to be solely for those entities’ internal use and not for

further sale or resale or other transfer of any type or for any consideration -- whether “money or any other thing of value.” Section 254(h)(3).

11. If the answer to the first question in number 10 is “yes,” should the discounts be available only for the traffic or network usage attributable to the educational entities that qualify for the Section 254 discounts?

Not applicable.

### **High Cost Fund**

26. If the existing high-cost support mechanism remains in place (on either a permanent or temporary basis), what modifications, if any are required to comply with the Telecommunications Act of 1996?

There are several major flaws in the existing universal service support mechanisms and consequently, the same should not, except as noted below, remain in place. The existing mechanism relies on embedded subsidies in incumbent LEC (“ILEC”) prices. Such embedded subsidies are inconsistent with the Act because they are neither explicit or targeted. Additionally, such embedded subsidies are unsustainable in a competitive market place. They create artificially low rates for the subsidized services, which in turn, cause a barrier to competitive entry. For those services that provide the subsidy, an artificial signal is sent to the marketplace inviting entry by firms that may have unsustainable cost behaviors.

To meet the requirements of the Act, the existing high-cost fund would have to be modified in such a way that removed the implicit subsidies and make the explicit subsidies competitively neutral, specific and predictable. The method of determining who pays into the fund would have to be changed to require contributions by all providers of telecommunications services. Secondly, the method would need to be modified to enable specific and predictable mechanisms. However, if a modification is attempted, the first area should be to publicly recognize the implicit forms of the subsidies that exist for universal service. Examples of such implicit form of subsidy include the carrier common line charge (“CCLC”) and the residual interconnection charge (“RIC”). The second area of focus should be to require all telecommunications service providers to contribute to the fund. Because IXCs are already

contributing indirectly via higher than necessary access charges, the direction should be to require those telecommunications providers not currently contributing to assist in the funding.

However, Sprint does not believe that such modifications are the appropriate course to follow, but rather the existing system should be eliminated in favor of a system that uses proxy costs calculated using the BCM as part of the Universal Service plan submitted by Sprint recommended in its previously filed comments.<sup>4</sup> Because the revisions recommended by Sprint will be significant, some short -- not to exceed two years -- transition period may be appropriate.

That said, Sprint acknowledges that there is some basis to leave rural telephone companies that are not subject to the requirements of Section 251(c), 47 USC Section 251(c) on the existing high-cost support mechanism for so long as they are exempt from such requirements pursuant to Section 251(f), 47 USC Section 251(f). The BCM proxy model is designed to foster and work in a competitive marketplace. Because rural telephone companies that are not subject to the requirements of Section 251(c) are generally not operating in a competitive market, the BCM may not be appropriate. However, at such time as compliance with Section 251(c) is required, the existing support system will no longer be acceptable for those rural telephone companies.

If the Commission adopts a short transition plan and an "exception" for rural telephone companies, in order to ensure compliance with the Act's mandate for predictable universal service support mechanisms, the cap on the fund should be made permanent and the method of funding must be changed so that all providers of telecommunications services make equitable and nondiscriminatory contributions.

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<sup>4</sup> Comments of Sprint Corporation, filed April 12, 1996 and Reply Comments of Sprint Corporation filed May 7, 1996.

27. If the high-cost support system is kept in place for rural areas, how should it be modified to target the fund better and consistently with the Telecommunications Act of 1996?

As noted above, the existing high-cost support system should not be kept, except to the extent a short transition period is deemed necessary and if it is deemed advisable to exempt rural telephone companies that are not obligated to comply with Section 251(c).

28. What are the potential advantages and disadvantages of basing the payments to competitive carriers on the book costs of the incumbent local exchange carrier operating in the same service area?

There are no advantages to basing payments to competitive carriers on the book costs of the ILEC. Such a method would artificially reward imprudent investment and operating inefficiencies of the (historical) monopoly period. Basing payments on book cost could also artificially reward distortions caused by historic accounting methods and/or depreciation policies. Additionally, such a method could be anticompetitive. As Sprint explained in its Comments:

[U]se of “actual” costs of an actual local exchange carrier would be contrary to the purposes of a universal service fund. Universal service support should be used to assist subscribers that need the assistance, not providers. The BCM, therefore, develops the cost of an efficient network for the purpose of determining a reasonable level of support which can be used to assist subscribers in high cost areas regardless of which provider the subscriber uses.

Costs to provide service to customers vary greatly between providers for many reasons: e.g., technology, engineering philosophy, discounts on material prices, management, efficiency. The use of accounting costs would provide no incentive for efficiency -- but rather just the opposite -- and would produce a condition where providers are not compensated equally for providing service to areas that are comparable based on distance, terrain and other common obstacles; in short, a system that is not competitively neutral.

Rather, the BCM estimates an economic cost that is representative of the costs any facility-based competitive local service provider to a particular market will incur to serve customers in that market. This is the appropriate mechanism because costs to serve a particular market should not be based on the incumbent architecture, but on how the architecture would be designed and implemented if built on a competitively neutral - as opposed to a legal monopoly - basis.<sup>5</sup>

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<sup>5</sup> Sprint Comments at pp. 9-11

29. Should price cap companies be eligible for high-cost support, and if not, how would the exclusion of price cap carriers be consistent with the provisions of section 214(e) of the Communications Act? In the alternative, should high-cost support be structured differently for price cap carriers than for other carriers?

Price cap companies must be eligible for high-cost support. The mechanism -- price caps -- that controls the maximum price charged for access products has little bearing on the attractiveness of providing a high cost area with local service. The public policy goal should be to attract the most efficient providers, so the societal cost of subsidizing is minimized. That will occur only if all capable entrants are eligible for high-cost support.

Furthermore, the point of universal service support is to support customers who live in high-cost areas -- not providers. Universal support payments must be entirely portable to go with any customer as that customer selects their service provider. A system that does not allow fully portable subsidies could well result, for example, in a situation where a CLEC can qualify as an eligible carrier in a high-cost area where the incumbent is a price cap carrier, but the incumbent price cap carrier cannot. As Sprint pointed out in its Comments, such a system would not be competitively neutral:

If the subsidy is not portable, then no amount of subsidy will be the correct amount because non-portable subsidies distort competitive markets. For instance, if the subsidy system favored one local service provider (e.g., the incumbent LEC) over others, the subsidized provider could keep its prices below its costs and remain profitable. In this instance the incumbent LEC could maintain prices below costs because its receipt of the subsidy maintains its financial viability. Such below cost pricing becomes an effective barrier to competition because potential competitors, who are not entitled to receive a subsidy, will be discouraged from entering the market if they cannot price at a cost below the subsidized price -- even though they may be able to provide the services at a cost less than the subsidized provider's cost.<sup>6</sup>

Finally, excluding price cap carriers would be contrary to the Act. Section 214(e) of the Act clearly includes all carriers that have met the eligible carrier criteria. Also, Section 254(e) of the act requires universal support to be explicit. To exclude price cap carriers would require the

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<sup>6</sup> Id., at pp. 10-11.

continuation of the current implicit funding of universal services and thus violate the Act's explicit subsidy mandate.

30. If price cap companies are not eligible for support or receive high-cost support on a different basis than other carriers, what should be the definition of a "price cap" company? Would companies participating in a state, but not a federal, price cap plan be deemed price cap companies? Should there be a distinction between carriers operating under price caps and carriers that have agreed, for a specified period of time, to limit increases in some or all rates as part of a "social contract" regulatory approach?

As noted, price cap companies must be eligible. For purposes of determining support from an FCC sponsored support system, price cap companies should be those companies that have selected FCC price cap regulation. If individual states adopt some form of proxy based universal service support, the test for state support might be whether or not a company is subject to rate of return regulation. Tests for state and federal support should be totally separate. The existence of a social contract should have no bearing on any companies eligibility to receive universal service support for customers who live in high-cost areas. Universal service support should be targeted to customers, not companies. Universal support payments must be entirely portable to go with any customer as customers select their service providers.

31. If a bifurcated plan that would allow the use of book costs (instead of proxy costs) were included for rural companies, how should rural companies be defined?

A bifurcated plan should not be adopted except to the limited extent deemed necessary for rural telephone companies that are not obligated to comply with Section 251(c). (See response to Question 26 above.)

32. If such a bifurcated approach is used, should those carriers initially allowed to use book costs eventually transition to a proxy system or a system of competitive bidding? If these companies are transitioned from book costs, how long should the transition be? What would be the basis for high-cost assistance to competitors under a bifurcated approach, both initially and during a transition period?

Under a bifurcated system, rural telephone companies who initially are allowed to use book costs to determine universal service support would have to move to the proxy system when

they are required to comply with Section 251(c) pursuant to the processes contained in Section 251(f).

For purposes of funding this transition period exception, the administrator of the new high-cost fund will need to ascertain the difference in funding required by any of the rural telephone companies electing the option to stay under the old mechanism. And that difference, increase or decrease, would need to be added to the calculations of the new proxy cost method.

33. If a proxy model is used, should carriers serving areas with subscription below a certain level continue to receive assistance at levels currently produced under the HCF and DEM weighting subsidies?

The level of subscription should not have any impact on the subsidy available.

#### **Proxy Models**

34. What, if any, programs (in addition to those aimed at high-cost areas) are needed to ensure that insular areas have affordable telecommunications service?

The programs that are developed to support high-cost areas should work in insular areas as well as they work in other areas.

35. U S West has stated that an industry task force "could develop a final model process utilizing consensus model assumptions and input data," U S West comments at 10. Comment on U S West's statement, discussing potential legal issues and practical considerations in light of the requirement under the 1996 Act that the Commission take final action in this proceeding within six months of the Joint Board's recommended decision.

The Joint Board should recommend adoption of Sprint's Universal Service plan, including the use of the BCM to determine the economic cost of providing supported service. The BCM has been fully documented on the record and has been built with flexibility to accommodate changes in the industry, the services provided, and costs. Few modifications will be necessary. However, to the extent BCM needs to be modified, Sprint recommends the use of a neutral party to receive suggestions for change, evaluate them, and recommend adjustments to the Commission for acceptance or rejection.



36. What proposals, if any, have been considered by interested parties to harmonize the differences among the various proxy cost proposals? What results have been achieved?

Some steps have been taken to identify differences in the existing models. There seems to be comparability, at the California state level, between the Pacific Bell CPM and the Sprint/U S West BCM. These two parties are discussing the possibility of combining the two models using, what their sponsors feel to be, the best procedures from each model.

37. How does a proxy model determine costs for providing only the defined universal service core services?

The BCM proxy model determines the costs for providing defined universal services by developing forward looking costs of the facilities and expenses needed to provide only those services.

38. How should a proxy model evolve to account for changes in the definition of core services or in the technical capabilities of various types of facilities?

To accommodate the addition of services to the list of universal services or new technology, a proxy model would have to be modified to include the cost of any new facilities required. The model would then have to be rerun to identify high-cost areas and the revised cost of the network. BCM2 has been created with the needed flexibility to easily accommodate such modifications.

39. Should a proxy model account for the cost of access to advanced telecommunications and information services, as referenced in section 254(b) of the act? If so, how should this occur?

To account for the cost of providing access to advanced services, the specific services would have to be identified. The BCM is capable of including any network investment or expense required to provide access to any services identified.

40. If a proxy model is used, what, if any, measures are necessary to assure that urban rates and rates in rural, insular and high-cost areas are reasonably comparable, as required in section 254(b)(3) of the 1996 act?

Proxy models are "cost" models and do not deal with rates charged for services. Once regulators have determined how rates should be adjusted to comply with the Act, the amount of

support necessary to promote universal service can be computed by using the costs from the BCM less the revenues expected from the adjusted rates

41. How should support be calculated for those areas (e.g., insular areas and Alaska) that are not included under the proxy model?

The BCM is capable of providing proxy costs for all areas. Costs for Alaska were filed with the Commission, in CC Docket 96-45, on July 3, 1996. Costs for the other insular areas will be filed by the end of August.

42. Will support calculated using a proxy model provide sufficient incentive to support infrastructure development and maintain quality service?

Costs developed using the BCM are what an efficient firm would incur in building a network to provide the services that have been identified as universal. Support based on these costs will be sufficient for an efficient company to provide and maintain quality services.

43. Should there be recourse for companies whose book costs are substantially above the costs projected for them under a proxy model? If so, under what conditions (for example, at what cost levels above the proxy amount) should carriers be granted a waiver allowing alternative treatment? What standards should be used when considering such requests?

Companies who have costs substantially above the costs developed by the BCM should not receive any additional support. The use of proxy costs provides incentives to companies to operate more efficiently. Provision of a method to allow companies to get around this measure of efficiency will destroy any incentive for a company to reduce their costs and become more efficient.

44. How can a proxy model be modified to accommodate technological neutrality?

The BCM achieves technological neutrality through the use of state of the art commercially available materials to build an efficiently designed network.

45. Is it appropriate for a proxy model adopted by the Commission in this proceeding to be subject to proprietary restrictions, or must such a model be a public document?

Any proxy model that is adopted by the Commission in this proceeding must be a public document. The BCM was filed as a public document in September 1995, and BCM2 was filed on July 3, 1996.

46. Should a proxy model be adopted if it is based on proprietary data that may not be available for public review?

No again, no model should be adopted if it is not made public.

47. If it is determined that proprietary data should not be employed in the proxy model, are there adequate data publicly available on current book costs to develop a proxy model? If so, identify the source(s) of such data.

As already stated, current ILEC book costs should not be used to develop a proxy model for universal service support purposes and thus whether or not such data is publicly available should not be an issue. Rather the BCM should be adopted. The BCM is a publicly available model and, for the most part, the inputs to the BCM are publicly available. The one small exception is with regard to certain switching costs elements that are not publicly available due to switch manufacturers' nondisclosure requirements. Sprint has previously suggested, and again suggests, that this switching cost issue could be resolved by having the switch manufacturers disclose their cost figures to the Commission and then the Commission publishing average switch cost data based on the aggregate of the data received by the individual manufacturers.

48. Should the materiality and potential importance of proprietary information be considered in evaluating the various models?

Yes, the materiality and potential importance of proprietary information should be considered in evaluating the various models. Indeed, Sprint believes that one of BCM's strengths is its reliance on -- predominantly -- publicly available data. And, as pointed out above, to the extent there is a small amount of non-public data used as an input to the BCM, there is an available mechanism that greatly ameliorates the problem.

### **Benchmark Cost Model (BCM)**

**56. How do the book costs of incumbent local exchange carriers compare with the calculated proxy costs of the Benchmark Cost Model (BCM) for the same areas?**

As Sprint has pointed out, the BCM does not rely on embedded ILEC cost information nor is embedded ILEC cost information a reasonable measure to use to develop proxy models. Rather, BCM relies on a forward looking methodology to develop the cost of an efficient network.

In Comments previously filed in this docket, Southwestern Bell Telephone Company ("Southwestern") objected to the BCM because it did not use "actual" costs of an actual local exchange carrier.<sup>7</sup> Southwestern claimed that the only way to verify the validity of the BCM was to compare BCM results with actual network costs of existing providers and Southwestern performed such a verification in sample wire centers in Southwestern's Texas service area. As Sprint stated in its Reply Comments:

Not surprisingly, SWBT's "verification" reflects differences between the BCM and existing USF data. Sprint would be surprised if such differences did not exist. . . . The BCM is not intended to replicate SWBT's, or any other incumbent's network, the BCM estimates an economic cost that is representative of the costs any facility-based competitive local service provider to a particular market will incur to serve customers in that market. That is the appropriate mechanism because costs to serve a particular market should not be based on the incumbent architecture, but on how the architecture would be designed and implemented if built new on a competitively neutral -- as opposed to a legal monopoly - basis.<sup>8</sup>

**57. Should the BCM be modified to include non-wireline services? If wireless technology proves less costly than wireline facilities, should projected costs be capped at the level predicted for use of wireless technology?**

It is possible to modify the BCM to include non-wireline service costs, but Sprint does not believe it is advisable at this time. Wireless networks -- today -- are much more varied than what exists with ILEC wireline networks and the costs vary accordingly. At such time as wireless

<sup>7</sup> Comments of Southwestern Bell Telephone Company, filed April 12, 1996, at p. 14. By "actual", SWBT was referring to incumbent ILEC embedded cost.

<sup>8</sup> Reply Comments of Sprint at p. 11.

networks become more standardized, BCM has the flexibility to add wireless services. In the interim, BCM has been modified to reflect the assumption that the wireless technology will prove less costly by capping the loop investment at \$10,000 per loop, based on preliminary tests that tentatively indicate that \$10,000 is the cross-over point between wireless and wireline technology.

**58. What are the advantages and disadvantages of using a wire center instead of a Census Block Group as the appropriate geographic area in projecting costs?**

The advantages clearly weigh in favor of using Census Block Groups (“CBGs”) as the geographic area in projecting costs. As Sprint explained in response to Southwestern’s objection to the use of CBGs:

Costs to serve end user customers may vary greatly over an exchange or wire center or any other large geographic area due to terrain conditions and the distance an end user may live from the serving central office. Sprint believes that high-cost support should be available to cover the cost of serving end users that live in specifically defined areas where the cost to serve them is greater than what would be considered affordable and reasonably comparable to rates charged for similar services in urban areas. However, even in very small communities, there are some areas where the cost to serve subscribers are reasonable compared to urban areas, and there are other areas that have cost many times that of urban areas. Accordingly, determining support at the smaller CBG level better targets support to specifically defined high-cost areas by eliminating some of the disparities in costs that can occur with a larger area. Additionally, the use of CBGs eliminates the implicit subsidy, inherent with a system where costs would be averaged throughout an entire exchange or wire center, of one group of subscribers by another.<sup>9</sup>

Attached hereto as Attachment A are three wire center maps (Porterville, CA; Indiana, PA; and Magnolia, AR) that show that BCM calculated monthly cost of basic residential service broken down for each CBG within the wire center. As can be seen from these maps, the cost in the Porterville, CA wire center range from a low of \$21.7775 to a high of \$148.518; in the Indiana, PA wire center range from a low of \$15.3831 to a high of \$81.578; and in the Magnolia, AR wire center range from a low of \$21.4207 to a high of \$93.8449. Such great variances

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<sup>9</sup> Reply Comments of Sprint at p. 3.

demonstrate that disadvantages, including implicit subsidies that would be created, of using a wire center as opposed to the smaller CBG.

59. The Maine PUC and several other State commissions proposed inclusion in the BCM of the costs of connecting exchanges to the public switched network through the use of microwave, trunk, or satellite technologies. Those commenters also proposed the use [of] an additional extra-high-cost variable for remote areas not accessible by road. What is the feasibility and the advisability of incorporating these changes into the BCM?

It can be done, but Sprint does not believe it is advisable. BCM already factors in differences in terrain and density. Others variables can be factored in, but where the variables are relative anomalies, the value achieved from such modifications are outweighed by the effort to identify and include all such variables.

60. The National Cable Television Association proposed a number of modifications to the BCM related to switching costs, fill factors, digital loop carrier subscriber equipment, penetration assumptions, deployment of fiber versus copper technology assumptions, and service area interface costs. Which if any, of these changes would be feasible and advisable to incorporate into the BCM?

Sprint already responded to many of National Cable Television Association's ("NCTA") proposed modifications in its Reply Comments and will not repeat those comments here.<sup>10</sup> As to NCTA's proposal that service area interface costs be included in the BCM, such costs are already included and always have been. Additionally, NCTA objected to the original assumption in the BCM that a copper run would not exceed 12,000 feet. BCM2 has now changed that assumption such that it is a user option to impute the length of the copper run.

61. Should the support calculated using the Benchmark Cost Model also reflect subscriber income levels, as suggested by the Puerto Rico Telephone Company in its comments?

First, it must be remembered that BCM does not calculate support. Rather, BCM calculates cost. Under Sprint's universal service support proposal, the regulator will determine the amount of support. Additionally, Sprint believe that eventually, those who can afford to pay at full cost, even those in high-cost areas, should do so. That aside, as Sprint has previously

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<sup>10</sup> Id., at p. 18.

stated, low income level subscriber issues are best addressed through the existing Lifeline and Linkup mechanisms.<sup>11</sup>

62. The BCM appears to compare unseparated costs, calculated using a proxy methodology, with a nationwide local benchmark rate. Does use of the BCM suggest that the costs calculated by the model would be recovered only through services included in the benchmark rate? Does the BCM require changes to existing separations and access charge rules? Is the model designed to change as those rules are changed? Does the comparison of model costs with a local rate affordability benchmark create an opportunity for over-recovery from universal service support mechanisms?

The BCM uses unseparated costs, however this does not suggest that the costs should be recovered only through the basic local residential services that should be included in the benchmark rate. Rather, as explained in Sprint's Comments and Reply Comments, the federal universal service support fund should be recovered through an explicit, uniform surcharge on end user bills for all services - interstate and intrastate - that the end user takes from the carrier.<sup>12</sup> This recovery mechanism and the BCM's methodology of calculating costs does not require changes to existing separations and access charge rules. Additionally, the BCM itself does not create an opportunity for over-recovery. The BCM merely calculates costs. It is up to the regulator to use that cost calculation to determine the amount of support.

63. Is it feasible and/or advisable to integrate the grid cell structure used in the Cost Proxy Model (CPM) proposed by Pacific Telesis into the BCM for identifying terrain and population in areas where population density is low?

Sprint and Pacific Telesis have commenced discussions on the feasibility of integrating the two models, however no determination has been made as to the advisability of such integration. As to the grid cell structure itself, such integration would not require modification of the BCM, but rather just a change in the data inputs to the BCM.

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<sup>11</sup> Sprint's Comments at p. 21.

<sup>12</sup> Sprint Comments at pp. 16-17 and Sprint's Reply Comments at p. 4.

## SLC/CCLC

69. If a portion of the CCL charge represents a subsidy to support universal service, what is the total amount of the subsidy? Please provide supporting evidence to substantiate such estimates. Supporting evidence should indicate the cost methodology used to estimate the magnitude of the subsidy (e.g., long-run incremental, short-run incremental, fully-distributed).

All of the CCL represents a subsidy to support universal service. Pursuant to Parts 36 and 69 of the Commission's Rules 47 CFR Sections 36.1 et. seq. and 69.1 et. seq., establishes that the whole purpose of the CCL and the End User Common Line charge is to cover the 25% (base factor portion) of the loop costs assigned to the interstate jurisdiction. Accordingly, 100% of the CCL charge is a subsidy of the cost of the local loop. As such it is designed to assist in keeping the price of basic telephone service low and, therefore, it supports universal service.

70. If a portion of the CCL charge represents a contribution to the recovery of loop costs, please identify and discuss alternative to the CCL charge for recovery of those costs from all interstate telecommunications service providers (e.g., bulk billing, flat rate/per-line charge).

Carrier common line charges contribute to the recovery of loop costs in an uneconomic manner. First, the loop is not a shared or common cost, it is a direct cost of an end user's access to the network. Recovery of loop costs from carriers instead of end users results in an uneconomic mismatch between cost causer and revenue provider. Second, loop costs are non-traffic sensitive. Whether it is used heavily or not at all has no impact on the cost of a loop. Recovery of non-usage sensitive loop costs on a per-minute basis results in an uneconomic mismatch between the way in which loop costs are incurred and revenues are generated. This fundamental violation of basic economic cost-causation principles has significant negative effects. Carrier access charges, and therefore toll rates, greatly exceed economic cost, discouraging use of interexchange services. Also incumbent end user local rates may be held uneconomically low, discouraging economic facilities-based competitive entry. Furthermore, uneconomic recovery of loop costs cannot be sustained in a competitive environment. In particular, the requirement of the Act and recent FCC regulations for loops to be provided on an unbundled basis and priced on economic cost, make the carrier common line charge completely unworkable.



The most economically efficient way to recover loop costs is to assess the cost to the end user via a flat rate, non-usage sensitive charge. However, to the extent it is determined that this makes an end user's service "unaffordable" and will negatively impact universal service, then universal service funding as proposed by Sprint in the use of the BCM and competitively neutral, targeted, needs-based funding (e.g., Lifeline, Linkup) should be adopted.

Additionally, Sprint believes the appropriate mechanism would be to eliminate the CCLC entirely. The federal universal service support fund should be funded, not through an implicit subsidy that clearly violates the Act, but through recoupment from end users of all carriers offering jurisdictionally interstate services through a uniform surcharge on end user bills for all services - interstate and intrastate - that they take from the carrier. As Sprint explained in its Reply Comments:

With such a surcharge all providers will make a fair and equitable contribution on exactly the same basis. Furthermore, the surcharge will be the same on the end user's bill regardless of the service provider thus further ensuring competitive neutrality. Additionally, such a surcharge furthers the TCA's [Act's] call for explicit mechanisms.<sup>13</sup>

### **Low-Income Consumers**

**71. Should the new universal service fund provide support for the Lifeline and Linkup programs, in order to make those subsidies technologically and competitively neutral? If so, should the amount of the lifeline subsidy still be tied, as it is now, to the amount of the subscriber line charge?**

Lifeline and Linkup should be funded through the new universal service fund in order to make those subsidies technologically and competitively neutral as well as compliant with the Act's requirement for explicit, neutral subsidies. However, continued tie of the lifeline subsidy to the amount of the subscriber line charge ("SLC") is not feasible or economically sound. The SLC is not tied to income levels, but rather is a fixed charge. A more equitable basis, and one that is better calculated to assist those low income individuals that truly need the help, would be to tie the amount of the subsidy to a specified percentage of local rates.

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<sup>13</sup> Sprint's Reply Comments at p. 4.